
Tradescantia boliviana (Commelinaceae), a New Combination for an Overlooked South American Species

Jason R. Grant

Laboratoire de botanique évolutive, Institut de botanique, Faculté des Sciences, Université de Neuchâtel, rue Émile-Argand 11, Case Postale 2, 2007 Neuchâtel, Switzerland.
jason.grant@unine.ch

ABSTRACT. The new combination *Tradescantia boliviana* (Hasskarl) J. R. Grant is made in recognition that it is a distinct species widespread in Peru, Bolivia, Paraguay, and Argentina, here separated by morphological characters and distribution from its previous inclusion within *T. ambigua* Martius ex J. H. Schultes, which is restricted to northeastern Brazil.

Key words: Argentina, Bolivia, Brazil, *Mandonia*, Paraguay, Peru, *Tradescantia*.

While researching the *Tradescantia* sect. *Mandonia* complex, problems in species limits and nomenclature were discovered in the non-Mexican species. A new combination is proposed as *Tradescantia boliviana* (Hasskarl) J. R. Grant in recognition that the material from Peru, Bolivia, Paraguay, and Argentina represents a distinct species. This species is here separated from synonymy under *T. ambigua* Martius ex J. H. Schultes, which is restricted to northeastern Brazil.

Ten species comprise *Tradescantia* sect. *Mandonia* D. Hunt. The group has a center of diversity in Mexico with six species: *T. burchii* D. Hunt [found in Jalisco], *T. crassifolia* Cavanilles (including *T. acaulis* Martens & Galeotti and *T. iridescens* Lindley) [northern Mexico to Guatemala], *T. exaltata* D. Hunt [Oaxaca], *T. llamasii* Matuda [Est. México], *T. peninsularis* Brandegees [Baja California], and *T. tepoxtlana* Matuda [Morelos] (Hunt, 1980, 1986). Four non-Mexican species range from Guatemala to South America: *T. ambigua* Martius [distributed in northeastern Brazil], *T. boliviana* (Hasskarl) J. R. Grant [Argentina, Bolivia, Paraguay, Peru], *T. petricola* J. R. Grant [Costa Rica, Venezuela] (Grant, 2000), and *T. velutina* Kunth & C. D. Bouché [Guatemala, Honduras, and Nicaragua].

While researching *Tradescantia petricola*, additional specimens were located from Venezuela that matched this previously envisioned Costa Rican endemic (Grant, 2000). While further searching among South American indets and among *T. am-*

bigua in many herbaria (COL, G, GH, IAN, INPA, L, MG, MO, NY, P, R, RB, SP, SPF, and US), it became evident based on plant size, leaf disposition, sepals, and distribution that the specimens from Peru, Bolivia, Paraguay, and Argentina were clearly different from those from Brazil. While it was initially thought that these represented a new species, the name *Mandonia boliviana* was found to apply. Type material of *Mandonia boliviana* was located at Leiden (L, 1 sheet), Paris (P, 3 sheets), and Geneva (G, 2 sheets), and its lectotypification is proposed below. Examination of this type material, and comparison to recently collected specimens, clarifies its identity as distinct from *T. ambigua*. Since the combination into *Tradescantia* has not been made, the new combination is proposed here.

Tradescantia ambigua is restricted to the caatinga of northeastern Brazil, while *Tradescantia boliviana* is restricted to the Gran Chaco of Argentina, Bolivia, Paraguay, and Peru (Fig. 1).

Tradescantia boliviana (Hasskarl) J. R. Grant, comb. nov. Basionym: *Mandonia boliviana* Hasskarl, Flora 54: 260. 1871. *Skofitzia boliviana* (Hasskarl) Hasskarl & Kanitz, Oesterr. Bot. Z. 22: 147. 1872. TYPE: Bolivia. Larecacha: “Viciniis Sorata montis colles Ullontigi ad scopulorum radicem in regione temperata,” 2700 m, Feb.–Apr. 1858, G. Mandon 1239 (lectotype, designated here, L [Herb. J. K. Hasskarl]; isotypes, G [2], K not seen, P, P [originally from ‘Herb. E. Cossen’], P [originally from ‘Herbier E. Drake’]).

Specimens examined. ARGENTINA. **Córdoba:** [entre Panolma y la Villa del Transito (P)], [zwischen Panolma unter der Villa del Transito und der Westseite der Tierra Achala de Cordoba (US)], 23 Feb. 1876, *Hieronymus s.n.* (P, US); Rodado, *Stuckert* 10938 (G); Sierra Cleica de Cordoba, *Stuckert* 13530 (G), *Lossen* 450 (GH); Punilla, Capilla del Monte, *Cuezzo & Balegno* 2144 (G, US). **Salta:** M. Sala, *Venturi* 8180 (GH, US); Cerro San Bernardo, Salta, W [no collector?] 6151 (GH); Orán, Pintascayo, *Pierotti* 6558 (G); Cachi, Quebrada de Escoipe, Ruta 30, 2 km

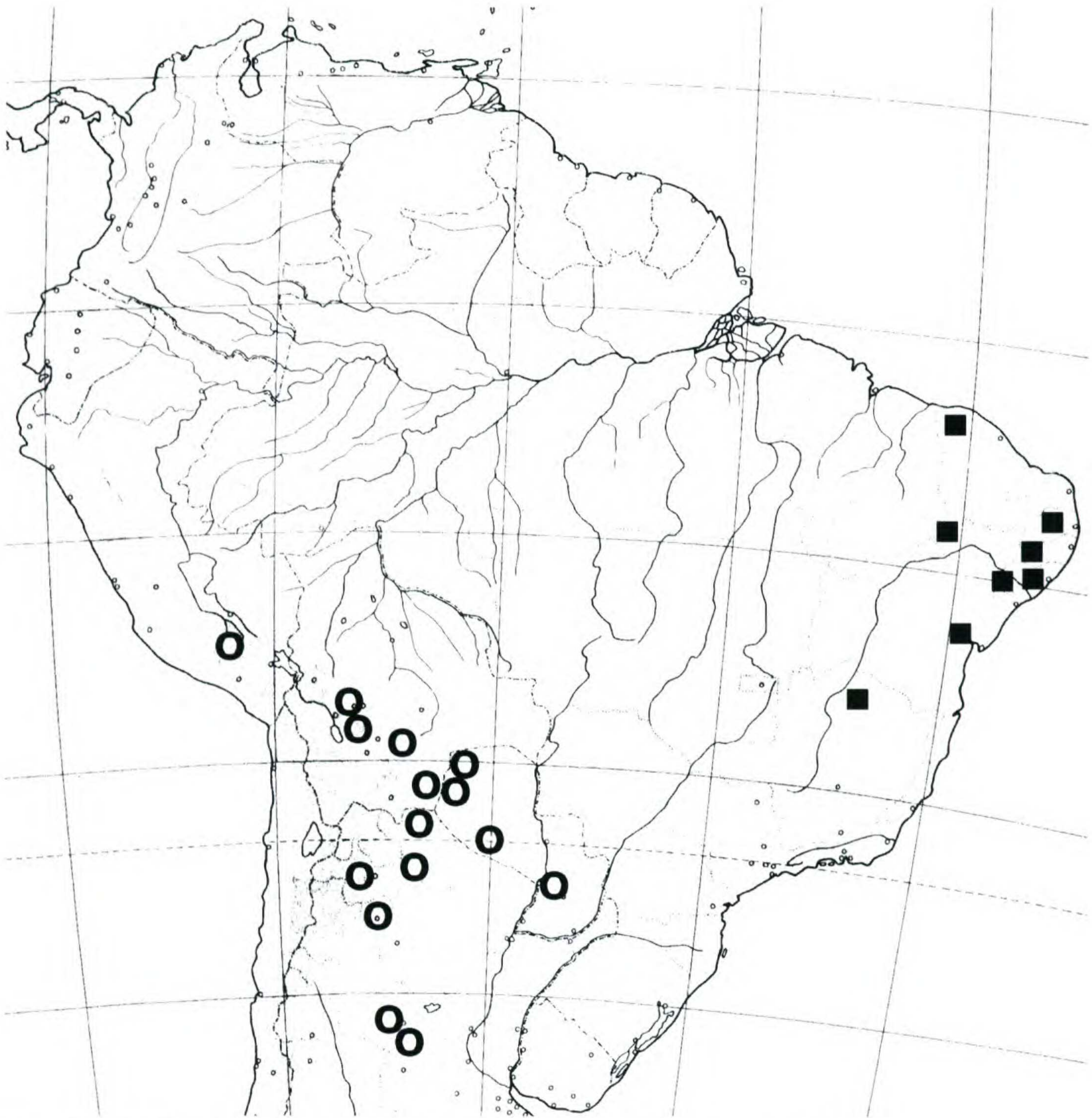


Figure 1. Distribution of *Tradescantia boliviana* in open circles, and *T. ambigua* in solid squares.

antes de El Maray, *Novara* 6067 (G); Rosario de Lerma, Quebrada del Río Blanco, 2–3 km al SW (aguas arriba) del río Toro, *Novara* 7603 (G [3]). **Tucumán:** Capital, Dunaquito, *Venturi* 1669 (GH, US), *Venturi* 1669a (GH, US); Tufi del Valle, *Venturi* 2921 (GH, US). **BOLIVIA.** **Chuquisaca:** Tomina, *Weddell* 3839 (P). **Cochabamba:** near Taquina, above Cochabamba, *Everdam* 25231 (G); Cochabamba, *Julio II* 174 (NY, US), *Cárdenas* 5569 (US); Camino a Sacabe, cerca a Cochabamba, *Ochoa* 670 (NY); Cercado de Cochabamba, la Colina de San Pedro, *Steinbach s.n.* (US); Campero, Mique, *Steinbach* 755 (GH, NY, US); Cerro San Pedro, behind Cochabamba, *Cutler & Cárdenas* 3839 (GH); Panduro, near Río Caine-Cochabamba, *Cárdenas* 2484 (US). **La Paz:** Sud Yungas, “Ridge of Pasto Grande,” on the ridge between Río La Paz Río Jucumarini, ca. 10–12 km up river from La Plazuela Bridge, *Lewis* 37176 (US). **Santa Cruz:** Prov. Cordillera, Alto Parapetí, *Michel* 127 (US); Nuflo de Chavez, Estancia San Miguelito, *Fuentes* 1547 (US). **Tarija:** Tarija, *Fiebrig*

2623 (G). **Without province:** Arampampa, Potosin, *Cárdenas* 5889 (US). **PARAGUAY. Chaco:** Mayor Pedro Lagrenza, *Schinini & Bordas* 15009 (G). **Cordillera:** In calle Tobaty, *Hassler* 4016 (G [2; The sheet # is included as [2], just sheet(s) is deleted.]); Cordillera de Altos, Co. de Tobatí, *Schinini* 23949 (G); Cerro Tobotí, *Degen* 731 (G); Tobotí, Cerro Tobotí, a 2 km de la ciudad, *Degen* 777a (G [3]); Cobratí, Cerro Llytu Silla, a 2 km al sur de la ciudad, *Deger et al.* 777b (G); Tobotí, “Ybytú Silla” mesa, *Zardini & Valázquez* 27437 (US); Cordillera de Altos, *Fiebrig* 960 (G [3], GH, P, US); “Paraguaria centralis, propre Sapucay/Ypacaray,” *Hassler* 12489 (G [2], GH, US). **Gran Chaco:** Santa Elisa, *Rojas* 2807 (G, P). **Guairá:** Villarrica, *Mereles* 2287 (G). **Nueva Asunción:** Fortín Tte. Enciso, ruta Trans-Chaco, *Schinini & Borda* 16496 (G). **Without province:** Orillas y mont cordilleras, *Hassler* 2189 (G). **PERU. Huancavelica:** Tayacaja, Valley of the Mantaro, below Surcubamba, *Weberbauer* 6495 (GH, US).

The name *Tradescantia ambigua* var. “glabra”

Hassler is annotated in Hassler's handwriting on several Geneva sheets, notably his apparent intended type *Rojas 2807*. It appears that this name has never been published, yet is nevertheless accounted for here to document history. Additionally, the name "Tradescantia brevistaristata Hassl. form. nov. angustifolia Hassler" is annotated on a duplicate of *Rojas 2807* at Paris. Both the specific epithet "brevistaristata" and the form name "angustifolia" appear to have never been published.

Barreto (1997) provided a treatment of the Commelinaceae in Brazil, including description and discussion of *Tradescantia ambigua*, and recognized no infraspecific taxa. She placed two varieties into synonymy, *T. ambigua* var. *glabriuscula* C. B. Clarke (1881) and *T. ambigua* var. *pilosula* Hoehne (1915). Neither of these names applies to *T. boliviana*.

KEY TO DIFFERENTIATE *TRADESCANTIA AMBIGUA* AND
T. BOLIVIANA IN SOUTH AMERICA

- 1a. Plants robust, the stems to 8–9 mm wide; leaves densely pilose on both surfaces, the pubescence similar to that of the inflorescences, laterally spreading to slightly erect but never decurrent; inflorescences compact along short internodes (to 1.5–3 cm); sepals 7–9 mm long; Brazil
 *Tradescantia ambigua*
- 1b. Plants slender, the stems to 3–5(–8) mm wide;

leaves merely hirsute, the trichomes much shorter than those of the inflorescences, laterally spreading to erect or commonly decurrent; inflorescences remote (1.5–5 cm); sepals (5–)6–8 mm long; Peru, Bolivia, Paraguay, Argentina
 *Tradescantia boliviana*

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